The opinion in support of the decision being entered today was <u>not</u> written for publication and is <u>not</u> binding precedent of the Board.

#### UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

MAII ED

. .

FFR 2 7 2006

U.S. PATENT AND TRADEMARK OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES Appeal No. 2006-0037 Application No. 10/009,746

ON BRIEF

Before GARRIS, TIMM and FRANKLIN, <u>Administrative Patent Judges</u>.

GARRIS, <u>Administrative Patent Judge</u>.

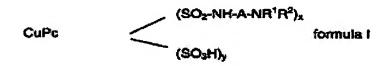
## **DECISION ON APPEAL**

This is a decision on an appeal which involves claims 2 and 8-14.

The subject matter on appeal relates to an optical data carrier having a writeable information layer containing at least one phthalocyanine dye in accordance with a certain formula. The appealed subject matter also relates to a process for producing the optical data carrier which comprises applying to a surface of a transparent substrate a solvent mixture containing the aforementioned phthalocyanine dye. This appealed subject matter

is adequately represented by independent claim 8 which reads as follows:

8. An optical data carrier comprising a transparent substrate, a writable information layer applied to a surface of said substrate and an optional reflection layer, said writable information layer containing at least one phthalocyanine dye of the general formula I,



In which

CuPc represents a copper phthalocyanine group,

A represents an optionally substituted straight chain or branched  $C_2$ - $C_6$  alkylene,

 $R^1$  and  $R^2$ , independently represent a member selected from the group consisting of hydrogen, straight chain or branched  $C_1$ - $C_8$  alkylene, substituted  $C_1$ - $C_6$  hydroxyalkyl, and an unsubstituted  $C_1$ - $C_6$  alkyl group, or  $R^1$  and  $R^2$ , together with the nitrogen atom to which they are bonded denote a heterocyclic 5- or 6-membered ring, optionally containing another heteroatom

X is 2.0 to 4.0,

y is 0 to 1.5 and

and the sum of x and y is 2.0 to 4.0.

The references set forth below are relied upon by the examiner as evidence of obviousness:

Nett et al. (Nett)	4,069,064	Jan.	17,	1978
Lacroix et al. (Lacroix)	4,111,650	Sep.	5,	1978
Crounse	4,379,710	Apr.	12,	1983
Sasakawa et al. (Sasakawa)	5,283,094	Feb.	1,	1994
Yanagisawa et al. (Yanagisawa)	5,424,171	Jun.	13,	1995
Miyazaki et al.¹ (Miyazaki '987)	JP 630307987	Dec.	15,	1988
(Published Japanese Patent App	lication)			
Miyazaki et al. <sup>2</sup> (Miyazaki <b>\</b> 790)	JP 01133790 A	May	25,	1989
(Published Japanese Patent Abstract)				
Kovacs et al. (Kovacs)			23,	1992
(Published European Patent Office Patent Application)				

Claims 2, 8-11 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yanagisawa and as being unpatentable over Miyazaki '987 in view of Kovacs.

All of the appealed claims are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yanagisawa in view of Sasakawa and Nett and as being unpatentable over the aforementioned references and further in view of Lacroix, Crounse and Miyazaki '790.

We note that on page 4 of the brief, the appellants state that "[c]laims 2 and 8-14 stand together as a single group."

<sup>&</sup>lt;sup>1</sup>Our understanding of Miyazaki '987 is based on the English translation of record.

<sup>&</sup>lt;sup>2</sup>Our understanding of Miyazaki '790 is based on the English language abstract of record.

Consistent with this statement, the brief contains no arguments concerning individual claims in accordance with 37 CFR § 41.37(c)(1)(vii)(September 13, 2004). Therefore, we have focused on independent claim 8 (i.e., the broadest appealed claim) in resolving the issues before us.

We refer to the brief and to the answer respectively for a complete discussion of the contrary viewpoints expressed by the appellants and by the examiner concerning the above noted rejections.

#### OPINION

For the reasons set forth in the answer and below, the reference evidence adduced by the examiner establishes a <u>prima</u>

facie case of obviousness with respect to independent claim

which has not been outweighed by the argument and evidence presented in the appellants' brief. We shall sustain, therefore, each of the rejections before us on this appeal.

Concerning the Section 103 rejection based on Yanagisawa, we share the examiner's conclusion that it would have been obvious for one with ordinary skill in this art to form the optical data carrier of example 1 with a copper based, rather than silicon based, phthalocyanine dye of the type used in this example in view of the express teaching in lines 67-68 of column 3 that the

"metal" atom of patentee's phthalocyanine dyes may be copper or silicon as well as other "metals."

This express teaching vitiates the appellants' argument that no motivation or reasonable expectation of success exists for the modification under review. Moreover, we find no convincing merit in the appellants' very general assertion that the R¹ and R² ligands shown in Yanagisawa's general formula militate against an obviousness conclusion. Notwithstanding the multiple bonds, including those of the aforementioned ligands, shown by this general formula, the artisan would have fully appreciated that differing bond arrangements would have been required by the differing valences of the various "metal" atoms of patentee's phthalocyanine dyes. For this reason and, again, because of the earlier noted express teaching of Yanagisawa, it would have been obvious for the artisan to modify the example 1 dye in the manner proposed to thereby yield the copper based phthalocyanine dye defined by appealed claim 8.

Under these circumstances, we are convinced that the Yanagisawa reference evidence establishes a <u>prima facie</u> case of obviousness vis-á-vis appealed claim 8.

<sup>&</sup>lt;sup>3</sup>Technically, silicon is not a metal.

As for the Section 103 rejection based on Miyazaki '987 and Kovacs, we agree with the examiner that it would have been obvious for one with ordinary skill in this art to modify the phthalocyanine dye, for example, of the Miyazaki '987 working example 15 (e.g., see page 14) by using a copper rather than lead metal atom in view of Kovacs' teaching that it was known in the prior art to use either copper or lead as well as other metal atoms in formulating phthalocyanine dyes of the type under consideration (e.g., see Kovacs at page 3, particularly lines 55-57 thereof).

Once again, we are unconvinced by the appellants' argument that no motivation or reasonable expectation of success exists for this proposed modification. An artisan would have been motivated to effect this modification based on a reasonable expectation for the success thereof given the teachings in Miyazaki '987 for phthalocyanine dyes based on metal atoms generally (e.g., see page 2) and based on a lead atom specifically (e.g., see page 14) in combination with the aforenoted teaching in Kovacs of such dyes based on metal atoms generally including copper and lead specifically.

Moreover, our determination of motivation based on a reasonable expectation of success is reinforced by the fact that

both Miyazaki '987 and Kovacs envision using common solvents such as methanol for their respective phthalocyanine dyes (see working example 15 on page 14 of Miyazaki '987 in comparison with lines 29-36 on page 12 of Kovacs). Finally, this last mentioned point renders unpersuasive the appellants' contention that the combination of these references would result in dyes which would be expected "to exhibit poor solubility in the most common solvents for spin coating" (brief, page 8).

In light of the foregoing, the combined teachings of Miyazaki '987 and Kovacs establish a <u>prima facie</u> case of obviousness for the subject matter defined by appealed claim 8.

For reasons analogous to those discussed above, a <u>prima</u>

<u>facie</u> case of obviousness with respect to claim 8 also is
established by the references applied in the examiner's Section

103 rejection based on Yanagisawa in view of Sasakawa and Nett as
well as the Section 103 rejection based on these references and
further in view of Lacroix, Crounse and Miyazaki '790.4

The evidence appendix of the appellants' brief includes a copy of the Stawitz declaration of record, filed February 23, 2004 and executed February 9, 2004. This declaration is very

<sup>&</sup>lt;sup>4</sup>With respect to independent claim 8, the applied references which are additional to Yanagisawa are cumulative and need not be discussed in our disposition of this appeal.

Appeal No. 2006-0337 Application No. 10/009,746

generally and briefly mentioned in the first paragraph on page 4 as well as the paragraph bridging pages 7 and 8 of the brief.

However, the brief contains no reasonably specific explanation of why this declaration is thought to evince nonobviousness. In any case, our examination of this declaration reveals ample support for the examiner's position that this declaration evidence (even when viewed in its most generous light) is not commensurate with the scope of independent claim 8.5 See In re Dill, 604 F.2d 1356, 1361, 202 USPQ 805, 808 (CCPA 1979) (evidence presented to rebut prima facie case of obviousness must be commensurate in scope with claims to which it pertains).

Particularly in view of this last mentioned circumstance, it is our ultimate determination that the argument and evidence of record, both for and against patentability, weigh most heavily in favor of an obviousness conclusion. We hereby sustain, therefore, each of the Section 103 rejections advanced by the examiner on this appeal.

<sup>&</sup>lt;sup>5</sup>Significantly, the appellants have filed no reply brief contesting the examiner's above noted position.

Appeal No. 2006-0337 Application No. 10/009,746

The decision of the examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR \$ 1.136(a).

### <u>AFFIRMED</u>

BRG: hh

Appeal No. 2006-0337 Application No. 10/009,746

BAYER MATERIAL SCIENCE, LLC 100 BAYER ROAD. PITTSBURGH, PA 15205